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10/714,672	11/18/2003	Osamu Yamashita	WN-2622	2304

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EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT PAPER NUMBER

2617

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/714,672
Filing Date: November 18, 2003
Appellant(s): YAMASHITA ET AL.

Frederick E. Cooperrider
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/2/06 appealing from the Office action mailed
2/14/06.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

This appeal involves claims 1-5, 7-14, and 16-20.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20040224684	Dorsey et al.	11-2004
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20040203745 a1	Cooper	10-2004
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Ramesh et al., WO 02/37889 A1, WIPO , 10-2002

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-5,7-14, and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **1,2,4,5,8-11,13,14,17,18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ramesh et al. WO 02/37889 A1, "Ramesh"**, hereinafter in view of **Palenius et al. US Patent Pub. No.2004/0058650 A1, "Palenius"**, hereinafter.

Consider **claim 1**, Ramesh teaches a method of determining a most suitable cell **12 (Figure 1)**(i.e., Channel allocation) during network acquisition for a cellular communication device **100 (Figure 1)** based on a characteristic of signals (i.e., power measurements) received from a plurality of cells **12 (Figure 1)**(pg.5 lines 1-5), the signals from each cell being provided over a band of frequencies, and said method comprising: taking a series of measurements of said characteristic for each frequency of a first band(pg. 8 lines 20-21), so as to obtain an average measurement value of said characteristic for each frequency of said first frequency band(pg. 3 lines 1-25),wherein the series of measurements on said first frequency band are equally spaced in time, with equal time intervals there between(pg. 10 lines 3-23).

However, Ramesh does not specifically teach during the time intervals between measurements for said fist frequency band, taking a series of measurements of said characteristic for each frequency of a second frequency band.

In the same field of endeavor, Palenius teaches during the time intervals between measurements for said first frequency band, taking a series of measurements of said characteristic for each frequency of a second frequency band (i.e., see figure 2)(paragraph 0014 and paragraph 0033).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ramesh to include during the time intervals between measurements for said first frequency band, taking a series of measurements of said characteristic for each frequency of a second frequency band as taught by Palenius for the purpose of efficient cell search.

Consider **claim 2** and as applied to **claim 1** above, Ramesh as modified by Palenius teaches a method wherein said characteristic comprises the signal strength (i.e., power measurements)(pg. 3 lines 1-5).

Consider **claim 4** and as applied to **claim 1** above, Ramesh as modified by Palenius teaches wherein said series of measurements comprises a series of five measurements (pg. 3 lines 18-22).

Consider **claim 5** and as applied to **claim 1** above, Ramesh as modified by Palenius teaches wherein each of said equal time intervals is in the order of 0.5 second (i.e., the power measure intervals are chosen to minimize the amount of time needed. The intervals can be fixed so that other measurements are interleaved in equally spaced fixed predetermined intervals such as 0.5 seconds (pg. 9 line 25 – pg. 10 line 2 and pg. 11 lines 1 –5).

Consider **claim 8** and as applied to **claim 1** above, Ramesh as modified by Palenius teaches wherein said first and second frequency bands operate in a single operating mode and second stage (i.e., next repetition) search operations are conducted during the said equal time intervals (i.e., the measurement periods are interleaved) (pg. 3 lines 5-8).

Consider **claim 9** and as applied to **claim 8** above, Ramesh as modified by Palenius teaches a method wherein said second stage (i.e., next repetition) operations are conducted on

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cells found to have high signal strength after the first measurement (i.e., the decision block determines whether to repeat the power measurements on each carries) (pg. 13 lines 7-12).

Consider **claim 10**, Ramesh teaches a cellular communications device **100 (Figure 1)** for determining a most suitable cell **12 (Figure 1)**(i.e., Channel allocation) during network acquisition for a cellular communication device, based on a characteristic of signals (i.e., power measurements) received from a plurality of cells **12 (Figure 1)**(pg.5 lines 1-5), the signals from each cell being provided over a band of frequencies, said cellular communication device comprising: a first unit for taking a series of measurements of the characteristic for each frequency of a first frequency band (pg. 8 lines 20-21), so as to obtain an average measurement value (pg. 3 lines 1-25), wherein the series of measurements on the first frequency band are equally spaced in time, with equal time intervals there between (pg. 10 lines 3-23).

However, Ramesh does not specifically teach a second unit for taking a series of measurements of the characteristic for each frequency of a second frequency band during the time intervals between the measurement for the first frequency band.

In the same field of endeavor, Palenius teaches a second unit for taking a series of measurements of the characteristic for each frequency of a second frequency band during the time intervals between the measurement for the first frequency band (i.e., see figure 2)(paragraph 0014 and paragraph 0033).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ramesh to include a second unit for taking a series of measurements of the characteristic for each frequency of a second frequency band during the

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time intervals between the measurement for the first frequency band as taught by Palenius for the purpose of efficient cell search.

Consider **claim 11** and **as applied to claim 10 above**, Ramesh as modified by Palenius teaches wherein the said characteristic comprises the signal strength (i.e., power measurements)(pg. 3 lines 1-5).

Consider **claim 13** and **as applied to claim 10 above**, Ramesh as modified by Palenius teaches wherein said series of measurements comprise a series of five measurements (pg. 3 lines 18-22).

Consider **claim 14** and **as applied to claim 10 above**, Ramesh as modified by Palenius teaches wherein each of said equal time intervals is in the order of 0.5 second (i.e., the power measure intervals are chosen to minimize the amount of time needed. The intervals can be fixed so that other measurements are interleaved in equally spaced fixed predetermined intervals such as 0.5 seconds (pg. 9 line 25 – pg. 10 line 2 and pg. 11 lines 1 –5).

Consider **claim 17** and **as applied to claim 10 above**, Ramesh as modified by Palenius teaches wherein said device is for use with a single mode cellular communications device **100** (**Figure 1**), and second stage (i.e., next repetition) search operations are conducted during the said equal intervals (i.e., the measurement periods are interleaved) (pg. 3 lines 5-8).

Consider **claim 18** and **as applied to claim 17 above**, Ramesh as modified by Palenius teaches a device wherein said second stage (i.e., next repetition) operations are conducted are conducted on cells found to have high signal strength after the first measurement (i.e., the decision block determines whether to repeat the power measurements on each carries) (pg. 13 lines 7-12).

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Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ramesh et al.**

WO 02/37889 A1 "Ramesh", hereinafter in view of Palenius et al. US Patent Pub.

No.2004/0058650 A1, "Palenius", hereinafter and further in view of Cooper Pub No. US

2004/0203745 A1

Consider **claims 3 and 12** and as applied to **claims 1 and 10 above**, Ramesh as modified by Palenius teaches the claimed invention except for characteristics that are derived from signal strength.

In the same field of endeavor, Cooper discloses a method and device 2 (i.e., Mobile station) (**Figure 1**) wherein said characteristic comprises a derivative of signal strength (i.e., Signal to Noise Ratio) (**page 2 paragraph 0011**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention made by Ramesh as modified by Palenius to include other characteristic measurements as taught by Cooper for the purpose of improving the network acquisitioning.

Claims 7,16,19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ramesh et al. WO 02/37889 A1, "Ramesh", hereinafter in view of Palenius et al. US Patent Pub.**

No.2004/0058650 A1, "Palenius", hereinafter and further in view of Dorsey et al., Pub No. US 2004/0224684 A1.

Consider **claim 7 and 16** and as applied to **claims 19 and 20 below**, Ramesh et al. clearly discloses the claimed invention.

However, Ramesh as modified by Palenius does not teach a method and device wherein one operating mode comprises GSM and the other operating mode comprises UMTS.

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In the same field of endeavor, Dorsey et al. discloses a method and device wherein one radio access technology comprises GSM and a second radio access technology comprises UMTS (i.e., per the 3GPP specification) (**paragraph 0002**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use GSM and UMTS modes for the Dual Mode phones as taught by Dorsey et al. in the invention of Ramesh as modified by Palenius for the purpose of diversifying technologies and wireless area coverage.

Consider **claims 19 and 20** and as applied to **claims 1 and 10** above, Ramesh as modified by Palenius teaches the claimed invention except wherein said first and second frequency bands operate in different operating modes.

In the same field of endeavor, Dorsey et al. teaches except wherein said first and second frequency bands operate in different operating modes (i.e., The specific frequency bands originally defined by the UMTS standard are 1885-2025 MHz for uplink and 2110-2200 MHz for downlink. Most GSM networks operate at 900 MHz or 1800 MHz. The exception to the rule are networks in parts of the Americas (including the USA and Canada) that operate at 850 MHz or 1900 MHz)(**paragraphs 0002 and 0003**).

(10) Response to Argument

In response to applicant's argument that the independent claims requires that the technique be used for selecting the most suitable cell, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicant further

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argues that, "Ramesh clearly describes its technique as directed to the selection of the most suitable channel". In response, Examiner respectfully notes that all channels are part of a cell and multiple cells make up a wireless system. Ramesh states on page 8 lines 17-19 that the present invention provides a method of performing power measurements in a more time efficient manner so that the mobile terminal 100 can select a channel and acquire service with the *wireless communication system* more quickly. Cellular systems are defined by cells and cells coverage. Each base station defines a cell based on the coverage which is defined in part by the power the power measurements are taken based on the geography of the mobile terminal with respect to the base station in a cell. In order to make a cell measurement a mobile terminal must be within a cell. When a mobile terminal moves the cell is re-defined based on the geographic position of the terminal (i.e., a new cell) once in a new cell a new channel can be acquired. Based on the above reasoning Ramesh teaches cell acquisition for at least the fact that channels must be chosen within cell region based on the fundamental make up of a "cellular" system. If the cell region (i.e., mobile terminal location changes) the power measurements are taken based on the channels of the new cell. Furthermore, the Applicants argued limitation (i.e., determining the most suitable cell) is in the preamble. If the steps of the method are in the body of the claim then the prior art meets the intended use:

Applicant further argues that the rejection currently of record that Ramesh addresses two distinct band of frequencies, nor is there any indication that the search being conducted in Ramesh is a simple search of frequencies.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., two distinct

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band of frequencies) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner notes in office action dated 2/7/06 that Ramesh teaches on page 8 lines 20-21 that the mobile terminal 100 performs power measurements on each carrier in *one or more frequency bands* of interest.

Regarding whether primary reference Ramesh can be modified without changing its principle of operation. As noted in the above arguments the channels of Ramesh are chosen based on the cell via power measurements, therefore, Ramesh selects a cell automatically by at least when selecting a channel within cell. Furthermore, take for instance when standing at the edge of a cell (i.e., adjacent a new cell), Power measurements are taken from both cells and a channel is allocated based on the best criteria within a cell, thus cell selection.

In response to applicant's argument that Palenius is not properly combinable with primary reference Ramesh, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, Palenius teaches (with respect to the cited sections in the rejection) in paragraph 0008 that a mobile terminal may need to synchronize to the timing and the scrambling code used by a serving cell *before any communications with the base station can take place*. The process of searching for one or more cells is referred to as cell search. The mobile terminal may perform cell search after it has been switched on (initial search), while it is in an idle mode (not using a traffic channel), and/or while it is in a dedicated mode (actively using a traffic channel). During cell search, the mobile terminal may identify cells that may be

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used to initiate communications or handover. The cell search strategy based on the above is considered more efficient based on the methods of cell searching.

In response to applicant's argument that Cooper is not properly combinable with primary reference Ramesh, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, Cooper teaches in Paragraph 0011 as cited in the previous rejection that the system determination unit stores the selected systems in the candidates list and instructs the searcher to analyze a received signal corresponding to each of the systems in the candidates list. For each listed system, the searcher instructs the transceiver to switch to the system's corresponding channel and a received signal is analyzed. The analysis of the received signals may include measuring the received signal strength (Rx) of each system, measuring the signal to noise ratio E.sub.c/I.sub.o, or other tests that assist in determining whether the candidate system is likely to be acquired, provided that the test requires less than time than a complete system acquisition and registration attempt.

Regarding whether secondary reference Dorsey qualifies as prior art reference. In the first Non final office action dated 11/10/05 the Examiner respectfully submitted the following statement to Applicant:

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in **United Kingdom** on **March 28 2003**. It is noted, however, that applicant has not filed a

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certified copy of the 0226980 application as required by 35 U.S.C. 119(b). The copy submitted, **DE 10314 694.6 does not match.**

In response on page 8 of Applicant remarks dated 11/16/05: The Applicant traversed the contention that the foreign priority document was not sent and received by the office. And issued the following statement *Accordingly, it is submitted that the correct priority application was submitted and is within the Patent and Trademark Office. Acknowledgement of its receipt is respectfully requested.* however the Applicant did not resubmit a copy of the Foreign Document for a proper review.

In the final office action dated 2/14/06 the Examiner respectfully submitted the following statement to Applicant:

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in **United Kingdom on March 28 2003**. It is noted, however, that applicant has not filed a certified copy of the 0226980 application as required by 35 U.S.C. 119(b). The copy submitted, **DE 10314 694.6 does not match. The correct priority application has not been received.**

In response on page 2 of Applicant remarks dated 4/4/06: The Applicant again traversed the contention that the foreign priority document was not sent and received by the office. However, the Applicant neglected to submit the foreign priority document as required for a proper and timely review.

Nonetheless, in Appeal Brief dated 9/2/06 Applicant submits a copy of the foreign priority document attached to the appeal brief.

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The Examiner respectfully submits that the evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons after numerous notices why the evidence was not presented earlier giving examiner time to consider if the document contains the claimed subject matter. 37 CFR 1.116(e).

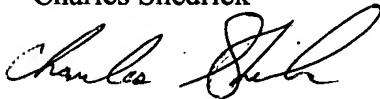
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Charles Shedrick




Conferees:

Lester Kincaid

Joseph Fields



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER